DEVELOPMENT CHALLENGES, South-South Solutions

E-newsletter of the Special Unit for South-South Cooperation in UNDP

Record-breaking Wireless Internet to Help Rural Areas

Many initiatives seek to bring inexpensive access to the internet to rural and remote regions around the world. One of the most successful ways to rapidly expand access is to offer wireless internet so that anyone can use a laptop computer, a PC or a mobile phone to quickly access the Net. Access to wireless internet is being rolled out in cities around the world with so-called 'hot spots', but the thornier issue of improving access in rural or remote regions could get better, thanks to a Venezuelan team.

The rapid expansion of mobile phones has done much to reduce the digital divide in Africa, for example, where the number has grown from just 15 million in 2000 to more than 160 million by the end of 2006, according to the International Telecommunications Union. This rapid growth has paid off: Morocco, Senegal, Ghana, Gabon and Cote d'Ivoire are in the top ten gainers of the Digital Opportunity Index, 2004-2006 (http://www.itu.int). The proliferation of Wi-Fi-enabled mobile phones combined with the spread of inexpensive wireless access has the potential to close the digital divide between rural and urban areas.

The issue of inequality in access to the internet has stark consequences for global economic development. Already, according to the World Information Society Report 2007, "Europe has achieved the largest overall gain in digital opportunity over the last two years, followed by the Americas... Asia and Africa have witnessed smaller gains in digital opportunity. The implications for the digital divide are clear: digital opportunity is becoming more sharply divided by region, not less."

As the Digital Divide campaign learned, it is more important to keep in mind "Internet kiosks or rental of cell phones and other devices hold great promise for the poor. But shared use is a complement to a strategy that involves giving each person their own wireless device. Eventually, the price of such devices will be low enough so that everyone can have their own device."

A Venezuelan team led by Ermanno Pietrosemoli, president of the Latin American networking association Escuela Latinoamerica de Redes, have broken the world record for unamplified broadcasting of a Wi-Fi (wireless internet) signal. The signal was broadcast in June from two mountains 282 kilometres apart in the Venezuelan Andes. Importantly, they did this using equipment costing only just over US $360, while producing a signal strong enough to send video messages. The former record was 220 kilometres set in 2005.

The consequence of this achievement for entrepreneurs is important: It means inexpensive wireless signals can now reach further into remote and rural regions for a small investment.

"We we're able to transmit voice and video with both," said Professor Pietrosemoli. "280 kilometres is pushing the envelope, but the same technique can be used at distances of some 150 kilometres by people with some basic training provided there is uninterrupted line of sight between the end points. This usually means shooting from hills or using them as repeater points. For distances up to 80 kilometres, towers can be used to provide connectivity even in flat land"

Pietrosemoli is willing to train people in the techniques he has developed for transmitting wireless over large distances

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(https://wireless.ictp.it or www.eslared.org.ve).

The advantages of this approach include cost and simplicity. The more commercial WiMax technology costs more and is usually installed by large companies. Pietrosemoli's technique is for people who lack those technical and financial advantages.

"I have been installing wireless networks for some 20 years," he continued, "and reckon that wireless is the only viable alternative to ameliorate the digital divide in developing countries. For rural areas, the challenge is to use as little repeater sites as possible, as each repeater adds costs, delay and powering issues."

Pietrosemoli said the only other obstacle to setting these networks up is the availability of unlicensed radio frequency spectrum in the 2,4 and 5 Ghz bands. The International Telecommunications Union has recommended that countries make these free for the use of data networks, but some countries are still blocking this.

LINKS:

- Wireless Networking in the Developing World: A Practical Guide to Planning and Building Low-cost Telecommunications Infrastructure

  - World Information Society Report 2007: A progress report on pledges to bring digital opportunity to all.

- The Wireless Geographic Logging Engine: This is a website with maps tracking the presence of Wi-Fi access around the globe. So far it maps over 10 million separate Wi-Fi networks. Entrepreneurs only have to log into the website to start searching for wireless networks near them.

A New House Kit for Slum Dwellers that is Safe and Easy to Build

By 2030, some 5 billion people around the world will live in cities. Next year, 2008, is predicted to be the tipping point, when urban dwellers (3.3 billion people) will outnumber rural residents for the first time. These are the conclusions of UNFPA's State of the World Population 2007 Report. Even more strikingly, the cities of Africa and Asia are growing by a million people a week. And 72 percent of the population in sub-Saharan Africa live in slum conditions.

But as populations grow -- and most will be poor, unemployed and under 25 -- it becomes critical that effective solutions are found to ensure people can live with dignity and comfort. And design is being used more and more to overcome this challenge.

George Martine, author of the UNFPA report, is blunt: "We're at a crossroads and can still make decisions which will make cities sustainable. If we don't make the right decisions the result will be chaos," he told the UK newspaper The Independent.

Guatemala-born architect Teddy Cruz of Estudio Teddy Cruz in San Diego, California, joins a small but growing number of socially responsible architects. He applies a concept more associated with middle class shoppers at the furniture design emporium Ikea to the world's estimated one billion urban slum dwellers (UN-Habitat). Without legal title to the land they live on, packed tightly into densely overcrowded shantytowns, most squatters and slum dwellers live in makeshift homes made from whatever they can get their hands on. This is estimated to include half the urban population of Africa, a third of Asia and a fourth of Latin America and the Caribbean (Click here for more information).

The ad-hoc shelters and houses they build can be dangerously unstable, and vulnerable to natural disaster from flash floods to earthquakes. Cruz had noticed that while building supplies and materials were plentiful, nobody was selling safe and affordable housing frames for slum dwellers. According to the International Labor Organization, formal housing markets in developing countries rarely supply more than 20 percent of housing stock.

Cruz's solution was to design a simple kit for building the frames for a house or a business that he now sells in Mexico. Each customer receives a manual, a snap-in water tank, and 36 frames that can be assembled in many configurations, or serve as a frame for poured concrete. These sturdy frames can also be added to with locally found materials. Cruz said he was inspired by "the resourcefulness of poverty" and by the cheap and affordable pre-fabricated homes that once were sold by catalogue by the American retailer Sears.

Cruz has been testing the structures in Tijuana, Mexico – a rapidly growing city on the border with the United States and a destination for Mexico's poor. His work as an architect has centred on exploring how informal settlements grow faster than the cities they surround. These settlements, he says, break the rules and blur the boundaries between what is urban, suburban and rural. Cruz's frame kits can be used to build a home, or combination of home and business, acknowledging the fact many people need to use their home as a business for a livelihood.

"These start-up communities gradually evolve," said Cruz., "or violently explode out of conditions of social emergency, and are defined by the negotiation of territorial boundaries, the ingenious recycling of materials, and human resourcefulness."

LINKS:

- More Urban, Less Poor: The first textbook to explore urban development and management and challenge the notion unplanned shanty towns without basic services are the inevitable consequence of urbanization.
- Slum Populations in the Developing World: A map showing the African countries with large slum populations and their percentage of the total population
- Architecture for Humanity: An NGO to promote architectural and design solutions to global, social and humanitarian crises.

Afro Coffee: Blending Good Design and Coffee

The importance of good design and a strong brand in the success of a business cannot be emphasised enough. That extra effort and thought can take a business from local success to regional and even global success. As consultants KPMG make clear, "For many businesses, the strength of their brands is a key driver of profitability and cash flow ". Yet the majority of small businesses fail to think about their brand values or how design will improve their product or service.

The case of Afro Coffee from Cape Town, South Africa shows how a small and humble café can raise its ambitions and its profits. It re-vamped its modestly successful café into a brand with global ambitions. By undertaking a thorough and comprehensive brand development inspired by the colourful vibe of Africa, Afro Coffee has built a consistent image from the design of its café and shop to its wide range of branded teas, coffees and fashion wear – all sold in the café, on the web and through distribution deals with other shops.

"It started out as a café in downtown Cape Town," said founder Grant Rushmere. "Our concept was to harness a Pan African view of contemporary urban Africa. The pop art nature of African design inspired us to create our own brand of coffee instead of the usual Italian coffee that most cafes use. Our goal was to refocus people to the origins of coffee – that it in fact originated in Africa before being discovered by the Arabs and from Yemen, exported around the world. Many people don't know this, so we attempt to capture and celebrate this African spirit in our packaging and all we do."

Afro Coffee had started out as a simple café. But after a major re-design and adoption of a new concept, the café has become a global brand and expanded into a branch in Europe. By infusing the spirit of Africa and its design aesthetics into all aspects of the café and its products – coffee, tea, fabrics, fashion - Afro Coffee has been able to develop a seamless image that is unforgettable.

Rushmere was joined by two Austrian partners to help with building the new brand and facilitating its global launch. "Design and branding have been a passion of mine," said Rushmere. "and these are realized through the Afro Coffee brand and the fun merchandising we develop. One of my partners has an international network of advertising agencies and the other has developed and owns a world-leading brand. With their experience, I will continue to guide the development of Afro Coffee."

Afro Coffee's website includes a video tour of the café and introduction to the 'Afro dude' character and a short cartoon video adventure. To help develop customer loyalty, the café has live bands three times a week from across Africa.

"Our mission is to communicate the joys of Africa through our Afro Cafes and our Afro-branded products. The fact that the African people are so wonderfully not self-conscious at all, with their humour and freedom and their style and design. Hopefully we can convey this spirit and enhance the lives of people who consume our product and sip coffee listening to Afro Tunes at our cafes. For South Africa, we try to show just how cool Afro culture actually is and instil a sense of confidence into people to make them realize what they already are - lofty ideals but we'll have a go!"

As the brand developed, a range of teas were produced using only African teas like Rooibos, a non-caffeine root. The next to come was fabrics based on West African religious clothing. They became table cloths and were so popular, they moved into combining them with leather to make Afro Bags – all part of expressing the lifestyle that inspires the brand.

Distribution deals have been done to distribute the teas and coffees throughout South Africa and in Europe. The clothing range is now available on their online store (www.afrocoffee.com).

Its African-infused design for its coffee stand won the Design Indaba 2007 Award, South Africa's design magazine and exhibition. Also designed by Peet Pienaar, it is inspired by Ghanaian woodwork and Kenyan coffee. The stand is a giant stiletto shoe stacked with tins of teas and coffees and an over-sized radio that doubles as a counter top.

Afro Coffee is proof a small business can grasp a bigger concept and in turn become a bigger success. It has been so successful, it has opened a new branch in Austria, begging the question: maybe this once-humble café is on the road to being an African Starbucks?

LINKS:

- Afro Coffee's award-winning display stand can be viewed at http://www.designindaba.com/
- Brandchannel: The world's only online exchange about branding, packed with resources, debates and contacts to help businesses intelligently build their brand.
- Small businesses looking to develop their brand can find plenty of free advice and resources here: www.brandingstrategyinsider.com
- Dutch Design in Development: Dutch designers are able to offer free support to new and small businesses in developing countries looking to export products to Europe.
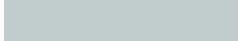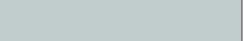
Banning of Plastic Bags and Containers Brings New Opportunities

This month, Uganda bans plastic bags, outlawing their import, manufacture and use and joining a growing list of African countries seeking to sweep cities of this menace. Uganda's ban follows similar moves in Kenya and in Tanzania, where even plastic drinks containers will soon be banished. Rwanda, also a member of the East African Community, has gone further - in 2005 the country banned any products made of very thin plastic below 100 microns. The thinner plastic found in plastic bags (under 30 microns) is particularly troublesome because it is easily blown around by the wind. The proliferation of plastic bags and plastic containers across the developing world has not only become an eyesore, it is also an environmental catastrophe that is poisoning the land.

In Uganda's capital, Kampala, discarded plastic has combined with toxic waste management practices to make the problem worse. While Kampala has 30 companies dealing in solid waste management, the process is mired in corruption. Poor areas of the city receive no service because it is more profitable for the companies to target wealthy areas for the user fees they collect to remove rubbish.

Scavengers in the municipal dump of Kampala earn 50 Ugandan pence a day collecting plastic bags. Most plastic bags do not make it to the dump, ending up blown around the city by the wind, washed into drains and water courses. Worse, the rich soil around Uganda's towns and villages is now covered in plastic bags. A new layer of polythene and contaminated soil has formed in many areas, with an impenetrable crust that stops rain from soaking through. It leaves water stagnating in pools gurgling with methane gas bubbles.

For entrepreneurs, tackling the mountains of plastic waste is an opportunity – as is providing a replacement once they are banned. A boon time is emerging for the market in recycled and reusable materials and biodegradable alternatives.

The So Afr-Eco Community Upliftment Project for Rural Women in South Africa is a common example. A project that proves money can be made from recycling discarded plastic bags into useful items. Based in the Obanjeni district in Kwazulunatal, it was founded by Jenny Kirkland, who was disgusted with the proliferation of plastic bags littering South Africa's countryside. She decided to do something that would also hire rural women and give them an income. The plastic bags are cut into strips of twine and then woven together to make hats, bags, doormats and waistcoats. Run as a for-profit business, it now employs 132 families and exports products to 19 countries, including Australia, the USA, the UK, Canada, Sweden and Poland. South African schools are now provided with sun hats and companies order hats for use at conferences. The profits made from sales are significant by local standards. For example, the sale of one beach bag can feed a small family for two weeks, a hat feeds a family for a week, and a doormat for a month.

Anita Ahuja, president of the NGO Conserve, has set up a business making fashionable handbags, wallets and shopping bags from recycled plastic bags in New Delhi, India. Begun in 2003, the project collects plastic bags on the streets and keeps 60 women employed. The recycling process does not require additional dyes or inks and is non-toxic. The bags are sold in London, UK and will soon be sold in Italy by the Benetton clothing chain.

"We braided them and tried weaving them, but the plastic would come loose. Then we hit upon the idea of pressing them to make sheets," Ahuja said.

But this issue can be more complex than it first seems. After South Africa banned plastic bags of less than 30 microns in 2003, many poor entrepreneurs have complained that it hit hard their making of hats, handbags, purses and scrubbing brushes from them – something that had become a good livelihood.

After the bags are banned, environmentalists say the best option is to use reusable bags made of materials that don't harm the environment during production and don't need to be discarded after use.

Alternatives to plastic bags include traditional African baskets or kiondos as they are known in Kenya. Made from sisal and sometimes with leather or wooden handles, the handmade bags support many local women (http://www.propoortourism-kenya.org/african_bags.htm).

In Kenya, entrepreneurs have also stepped in to offer alternatives to plastic and kiondos. Supermarkets and shops in the country distribute 11 million plastic shopping bags a year, so Joseph Ayuka of Greensphere Enterprises has begun to market cotton bags for their easy portability. "People don't want to carry bulky bags to the supermarket", he said.

LINKS:

- A Bangladesh case study on social entrepreneurs turning refuse into wealth:
  http://proxied.changemakers.net/journal/01may/index.cfm
- The Ethical Super Store has a wide range of recycled shopping bags and hand bags made to Fair Trade standards.
- A collective of women in the slums of Delhi, India sell fashionable recycled shopping bags online:
  http://www.theindiashop.co.uk/
- Hong Kong's first enterprise to make and sell recycled bags: http://www.recyclebag.net/eng/

Humanizing the Digital Age

Undoubtedly, the advance of information and communication technology (ICT) has provided a powerful tool for development, offering developing countries opportunities to improve healthcare, enhance education and allow for greater communication with their citizenry. Despite these advances, there remains a large gap between those who have access to ICT and use it effectively, and those who do not.

Humanizing the Digital Age presents addressing this gap. Composed of a collection of articles submitted to the conference on the "Impact of the Information Revolution on Global Development: How to Humanize the Digital Age" co-sponsored by Kadir Has University and Fordham University, the book examines the impact of the information and communication revolution on the world, including the major role it plays in providing unprecedented opportunities for economic and human development and how this revolution must be humanized with people placed at the center of all concerns to prevent the creation of a new divide—the "digital divide".

Edited by Uner Kirdar, Senior Advisor to the United Nations, the book incorporates authors from a wide variety of interdisciplinary backgrounds dealing with ICT. The authors focus on the impact of the information revolution from entrepreneurial perspectives, lessons for emerging market economies, the importance of ICT to South-South Cooperation, the close relationship between human development and the new ICT revolution and best practices and lessons gained from the experiences of Ireland, Spain, India, China and Turkey.

This publication is the result of a shared undertaking by the UNDP Special Unit for South-South Cooperation (SU/SSC), the United Nations Global Alliance for Information and Communication Technologies for Development, Kadir Has University, Fordham University and ESADE Business School.

"Humanizing the Digital Age" is a United Nations publication and is available online at https://unp.un.org

Window on the World

- **Knowledge Management for SMEs**
  --This new report puts the concepts into context and shows how, through mistakes and successes of case studies, how theory can be applied in practice to build sustainable competitive advantage and ensure future growth and development.
  Website: ResearchsandMarkets.com

- **The Shock of the Old: Technology in Global History Since 1900**
  by David Edgerton, Publisher: Profile Books
  --Edgerton is impressed by Creole technologies, like the 5,000-strong motor repair shop in Ghana, the Malaysian Tuk-Tuk scooter rickshaw, or the Bengali well pump-powered boats.
  Website: www.amazon.co.uk

- **The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It**
  by Paul Collier, Publisher: Oxford University Press
  Website: www.amazon.com

- **Imagine Africa: The Campaign to Promote and Strengthen African Arts**
  A new website to promote African artists.
  Website: www.imagineafrica.org

- **Plan B 2.0: Rescuing a Planet Under Stress and a Civilization in Trouble**
  by Lester Brown, Publisher: Norton
  Website: www.amazon.com

- **Wireless Networking in the Developing World**
  by Rob Flickenger, Corinna Aichele, Carlo Fonda, Jim Forster, Ian Howard, Tomas Krag and Marco Zennaro, Publisher: Creative Commons Attribution
  Website: http://www.lulu.com/content/223168

Job Opportunities

- Africa Recruit Job Compendium
  - Africa Union
    - CARE
  - Christian Children&'s Fund
    - ECOWAS
  - International Crisis Group
  - International Medical Corps
- International Rescue Committee
  - Internews
    - IREX
- Organization for International Migration
  - Oxfam

- Relief Web Job Compendium (UN OCHA) (1)
- Relief Web Job Compendium (UN OCHA) (2)
  - Save the Children
  - The Development Executive Group job compendium
    - Trust Africa
    - UN Jobs
      - UNDP
    - UNESCO
    - UNICEF
  - World Bank
- World Wildlife Fund (Cameroon)